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Marrakesh

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It is highly crucial to begin this article by the following point which not many people are aware of, but is perhaps one of the most decisive moments in Muslim history: the role played by the medieval Moroccan dynasties of the Almoravids and Almohads. They not only saved Morocco and Muslim al Andalus, but also saved the whole Muslim world from possibly terminal onslaught. Here, we only offer a brief summary of this decisive moment, and then, under the final heading we will say more. And whilst we will be able to inform, hopefully enough on this Moroccan role, we won't be able to go into the whole picture, for this demands a great deal of space, perhaps even a whole book, and this, of course, is not the right venue.



Figure 1. Medina of Marrakesh (Source (https://tr.wikipedia.org/wiki/Dosya:Maroc_Marrakech_Jemaa-el-Fna_Luc_Viatour.JPG))

So, briefly here, we remind how when the great Muslim ruler, ibn Abi Amir (Al-Mansur), who had made al Andalus the great power of his time, and who had conducted 52 military operations to stem the Christian reconquest of al Andalus died (in 1002), the situation in al Andalus changed dramatically for the worse. At his death, he was succeeded by his son who ruled for six years before the Peninsula entered a period of chaos. As civil war erupted throughout the territory, Cordoba was burned down in 1018.[1] Muslim Spain, soon, disintegrated into the era of the 'Party Kings' (reyes de taifas, muluk at-tawa'if) (1009-1091), with thirty more or less independent rulers.[2] Intrigues and civil war soon invited northern Christian invasions.[3] The first great Christian success was the capture of the stronghold of Barbastro, in 1064. Then there followed the even greater success: the capture of Toledo in 1085. Now, the whole of Muslim Spain was under threat. Delegated by the other Reyes, al-Mu'tamid of Seville took ship to North Africa and persuaded Yusuf ibn-Tashfin, the chief of the Moroccan Berber Almoravids, to intervene and save al-Andalus.[4] Yusuf, as we will recount further down, embarked for the Peninsula, and crushed the Christian armies at Zalakah (Sagrajas) (near Badajoz) (in 1086). This victory saved Muslim Spain, and

did even more. Indeed, thanks to his timely arrival and military victories, Ibn Tashfin (d. 1106), later emulated by the other great hero of Muslim Spain, the Almohad, Abu Yusuf Ya'qub al-Mansur (d. 1198), al-Andalus was kept under Muslim rule for another century and half. These victories by Ibn Tashfin and Abu Yusuf saved not just Muslim Spain but also North Africa and the whole Muslim world. Indeed, had al-Andalus fallen in the 1080s or sometime in the 12th century (rather than in the mid 13th century (as it subsequently did), Christian forces would have advanced through North Africa, then would have joined the crusaders in the East, and this could have meant the end of the Muslim world. Instead, the victories by Yusuf ibn Tashfin and Abu Yusuf Ya'qub al Mansur delayed the Christian invaders by nearly two centuries, and hence prevented the armies of the Christian Reconquista from joining with the Crusaders. This delay also allowed the Mamluks to come forth (after 1250). Under the mighty ruler, Baybars (d.1277), the Mamluks were able to crush both Crusaders and Mongols (see entries on Damascus, Baghdad, Aleppo, Hama...)[5] When al Andalus finally fell to the Christians (especially after the capture of the Almohad capital, Seville, in 1248,) although the Muslims lost al Andalus (with the exception of Grenada) Mamluk power in the East, and soon the rise of the Ottomans prevented the total collapse of the Muslim world.

We will not be able to look at all this in this particular essay, but at the end of it, we will say more on the Marrakesh based Almoravids and their ultimate role.



Figure 2-3: Two examples of the Almohad architecture: the Giralda in Seville and the Kutubiya in Marrakech. (Source (https://muslimheritage.com/article/history-culture-and-science-morocco-11th-14th-centurieshttps://muslimheritage.com/article/history-culture-and-science-morocco-11th-14th-centuries))

The Story of Marrakesh

Marrakesh was founded about 1070 by the Almoravids. The city became the capital of the empire in the Sahara as well as the Maghrib. It was strategically placed on the plain of the Tensift River, just within the arc of the Atlas at the convergence of two major routes across the mountains. In 1147 Marrakesh fell to the Almohads of the High Atlas, who made it the capital of their own. Even when residing in Seville, the city was the centre of the Almohad community with its scholars and military. Marrakesh became by desire of its rulers the centre of attraction for Maghribi scholars and even a certain number from Spain.[6] It was, thus, in Marrakesh that Ibn Rushd in 1153 became engaged in astronomical observations. In 1163 he became associated with the Almohad court; the philosopher Ibn Tufayl (1105-1185) introducing him to the Almohad ruler, Abu Ya'qub, who has greatly interested in philosophy. Ibn Tufayl recommended Ibn Rushd for this task.[7]

The Almoravids, the founders of Marrakesh, known as the veiled men of the Sahara were originally 'heathen.' The passage of Muslim traders across the desert brought them knowledge of Islam, and some of the nomads were fascinated by it. The dignity of a formal religion, with ritual and the Book delighted 'a people whose forebears had known only the haphazardry of idol and fetish worship.'[8] Following pilgrimage to Makkah in 1045, Yahia ibn Ibrahim, a chief of the Sinhajah Berber tribe, realised the state of religious ignorance in which his fellow-Berbers lived.[9] He met at Al-Qayrawan Abu Imran al-Fasi, a Malikite professor of Law, and requested him to provide a religious teacher to preach Islam among the tribesmen.[10] He finally arranged, though not without difficulty, that a man of religion from southern Morocco, 'Abd Allah b. Yasin, should accompany him on his return to teach his people what they did not know.[11] Abd Allah ibn Yasin had been trained in the schools of Cordova and Seville, and was a man of much ability, who taught seventy sheiks.[12] By great effort, as detailed by Ibn-Khaldun, he taught them the Qur'an and the practices of religion.[13] The teacher with a few of his devoted pupils retired to live apart from the world. The setting chosen for their hermitage was an island on a river beyond the desert, which could have been the Senegal, or the Upper Niger.[14] Their hermitage-colony, or "ribat," gave the Almoravids their name. Almoravids is a Spanish distortion of the words, al-Morabetin, meaning "The People of the Ribat." The word "marabout," a holy man, so widely used in Africa derives also from "ribat."[15]

Under the leadership of Abd-Allah ibn Yasin, the Almoravids, like the Arabs before them, were inspired, 'by the freshness of their conversion to Islam, to become great conquerors.'[16] Once they secured the trading routes, the Almoravids advanced into southern and western Morocco, taking Aghmat in 1057-8.[17] After conquering the Saharan regions of Morocco, they crossed the High Atlas during the summer of 450/1058, under the command of one of their great chiefs, Abu Bakr ibn 'Umar al-Lamtuni.[18] As the village of Aghmat became too small for the expanding dynasty, a new settlement was founded to the north of the High Atlas.[19] This was Marrakesh (Marrakush).[20]

In the conquest of Morocco, Abu Bakr ibn Umar had as a right hand commander of exceptional qualities: Ibn Tashfin. The latter's sense of military strategy was first class. As a prelude to future operations, he stormed the cities of Tangier and Ceuta, repaired or rebuilt their fortifications, constructed within their walls great magazines and arsenals, and garrisoned them with large bodies of veterans 'of tried courage and fidelity.'[21]

Whilst the news of a rebellion in the south drew there Abu Bakr ibn Umar,[22] Yusuf ibn Tashfin, in the meantime, in the north, began a long campaign against the Zenata Berbers in or around 1063, capturing Fez in 1070.[23] He established himself at Marrakech, transforming the city from a campground to a walled capital.[24] From this stronghold he moved east, taking Tlemcen (Tilimsan) (modern Algeria, and gradually extended his power to beyond Algiers, refraining from attacking the natural fortress of the mountain of the Kabyles.[25] When Abu Bakr ibn 'Umar was killed in the campaign in the south, Yusuf became the overall leader of the movement.[26] Thanks to his able military force, skills, and personal bravery, he was able to extend Almoravid dominions, which soon reached from the eastern boundary of Tunis to the Atlantic, from the Mediterranean to the Senegal. No African ruler had ever before wielded such enormous power.[27] He had by now subdued Meknes, Fes, Tangiers, Ceuta, Algiers, and Tunis—in fact, all the Berber portion of Africa between the Senegal River and Ancient Carthage.[28] In area and population, this territory greatly surpassed any previous other.[29] Thus came forth a great leader.

Ibn Tasfin, Arab writers say, was of medium height and build. He had a clear brown complexion and he had a thin beard. His voice was soft, his speech elegant. His eyes were black, his nose hooked, and he had fat on the fleshy portions of his ears. His hair was curly and his eyebrows met above his nose.[30] He had studied with Ibn Yasin for some twenty years. He was courageous, diligent in holy war, and austere in his tastes.[31] He dressed in wool and covered his face with a veil according to the custom of the desert tribesmen.[32] He ate barley and camel meat and drank milk. 'He was just and merciful. He was schooled in Sharia law.'[33]

Scott says

The years of Yusuf prolonged far beyond the ordinary term of human existence, included a full century, three ordinary generations of man. His active life, his abstemious habits, his freedom from those vices which waste the body and enfeeble the mind, enabled him to retain to the last the enjoyment of all his faculties. Although pitiless in the treatment of his enemies, it is related of him that during his entire reign, through motives of mistaken humanity, he never signed the death-sentence of a single criminal. Small indulgence was shown to the two tributary sects which, under the law of Islam, were permitted the exercise of their worship." [34]

This magnanimity was subsequently shown to his vanquished Spanish princes such as Abd Allah of Grenada, his brother Temim, and al-Mu'tamid of Seville, even when they had fought against him, Yusuf only exiled them to Morocco rather than ordering their execution. This was the man, when following the Christian capture of Toledo in 1085, and the threat to their principalities, the distressed Muslims of Andalusia came to ask to save them from King Alfonso VI of Castile.[35] We will look at this further down. Let's first look at the beginnings and Yusuf's foundation of Marrakesh.



Figure 4. Djemaa el-Fna (Source (https://www.telegraph.co.uk/travel/destinations/africa/morocco/marrakech/articles/marrakech-gettingthere/))

Marrakesh: Its Foundation and Dominance

When Ibn-Tashfin built Marrakech he had no idea at all of its potentialities. Its swift growth was amazing. His immediate successor saw a Marrakech with a population of nearly a million 'a hundred thousand hearth fires' in the old-fashioned phrase.[36]

The original walled camp which Ibn-Tashfin established was near where the Kutubia (Kutubya) now stands. "When the ramparts were being raised Yusuf-ibn-Tashfin pulled back his sleeves and set about making mortar and placing the rubble and rough stones along with the workmen, acting thus," says the Arab chronicler, "so as to show his humility before All-High-God."[37]

Marrakech in the rapidity of its growth from a camp to one of the largest cities in the medieval world lived up to its name, which was in the Berber language the equivalent of "Go quickly!"—or as we might say "Step lively!" The reason for it was that the site of Marrakech had been a place where caravans often were attacked and across which it was the habit for travellers to urge one another to speed their pace.[38] It was a brisk name for a new town. Europe in later years deformed it into Morocco (Marocco in old English; Maroc, French, etc.) and took to calling the whole country by that name.[39]

Marrakech delighted the men of old. Its setting astounded them: a glowing red city, fringed with palms and backed by the dazzling wall of the snowy Atlas Mountains. That snow was 'a cocktail to the eye of hot and tired travellers, a thrill to parched caravans.'[40]

The city itself was full of beauties and luxuries new to the North African scene. The Kutubia was the skyscraper of old Morocco. From its tower "men of the tallest stature on the ground below looked like little children, and you could see the country for fifty miles round about." [41] Strangers craned their necks to see the celebrated three golden balls which surmounted the tower. These balls were allegedly made from a royal lady's boiled-down jewellery. They were so large that the mosque door below had to be removed in order to pass through. They were not solid gold, let it be admitted, but it was stated that the gilding of the foundation base metal cost one hundred thousand Dinars (three hundred thousand United States dollars at late 1940s value).[42] The tower was partially coated with an ornamentation of exquisite beauty: turquoise blue tiles. At its base were the stalls of two hundred merchants of Muslim manuscripts which gave the Kutubia its name. The Mosque of the Book Sellers would indicate a remarkable local interest in literature.[43] The love of books was as strong in the Maghrib as in the Machrek, and Marrakesh was famed for its books, manuscripts, libraries and book shops. [44] The Kutubia with its hundred or so librarians gathered in the shade of the minaret, and the many intermediaries who rushed between places searching for rare and new manuscripts to copy; and also the dallals who bought and sold ancient works from and to the scholars of the city.[45] The sultans themselves collected both works and their authors, whom they wanted to have very close to them.[46]

One visitor asks:



How many towns have two hundred stores selling only books? The marvels of Marrakech

were the gossip of Africa. Folk talked of its guesthouse so thronged with distinguished travellers from far lands that a medieval poet says it sheltered "the world of all the Seven Climates... I did not know that such a reunion would be seen until the Day of Resurrection."[47]

During the reign of Yusuf and the early years of that of his successor, public order was maintained; the trade routes were secure; and the Castilians were so effectually kept in awe that they did not venture to make raids into Andalusia.[48] Neither, at first, did the government raise illegal taxes, and that fact, coupled with general tranquillity, secured public welfare.[49] A high level of prosperity, indeed, was attained: bread was cheap, and

vegetables could be obtained for next to nothing.[50] The provinces of Al-Maghrib, as well as those of Spain, had been seriously affected by wars and revolutions; their cities had been repeatedly plundered; their agricultural population had been greatly reduced by enslavement and starvation[51] Yet, at his death, Yusuf left to his successor about 60,000 seers, the equivalent of 120,000 pounds of gold.[52] The Ulama had a great influence in the court whilst on the other hand the free thinkers who had been patronised by the petty rulers were discouraged by the Almoravids.[53] Thus, despite the discontent of some such as the poets who thrived in the courts of the princes, the people as a whole were not dissatisfied.[54]

Ibn-Tashfin governed his people for forty-five years, and lived ninety-seven years, from 1009 to 1106.[55] He lived a temperate hardy life, and the popular songs of Algeria still exalt his fame.[56] His dominions embraced an area ten times greater than that of the Western Caliphate during the era of its greatest prosperity. Every Friday his name was repeated, 'for the homage and the prayers of the devout, from the pulpits of three hundred thousand mosques.'[57]

According to Ibn al-Athir:

The Emir of the Muslims, Yusuf Ibn Tashfin, was virtuous in his conduct, upright and just; he liked learned and pious men, treated them with honour and appointed them to act as magistrates in his states; he always let himself be guided by their counsels. In acts of clemency and the forgiveness of offences he took great pleasure." [58]

At his death, Yusuf left his dominions to his son Ali. Ali's rule was a disaster, which eventually led to the collapse of the Almoravid dynasty and its replacement by that of the Almohads. The Almohads would make of Seville in al Andalus their capital. Marrakesh still played a leading role, and here we can mention one great Almohad accomplishment in the city, its legendary hospital, also called the Bimaristan of Amir al-Muminin al-Mansur Abu Yusuf. Al-Mansur ruled Morocco from 1184 until his death in 1199.

We are told that:

Abu Yusuf ordered the masons and the builders to carry out his plans with the greatest perfection possible. He decorated the hospital with inscriptions and designs of surpassing beauty.... He ordered that flowers should be planted and cultivated in the courtyard, as well as fruit trees, and to have flowing water conducted to all the wards and rooms. He ordered the hospital to be equipped with furniture and to be covered with tapestries of wool, linen and silk, which gave an indescribable richness. He endowed it with ample waqfs and donations, providing the hospital with a daily sum of forty dinars for its expenses." [59]



Figure 5. Gate of Marrakesh (https://en.wikipedia.org/wiki/Marrakesh), 1919 (Source (https://en.wikipedia.org/wiki/File:Marrakech-Koutoubia 1919.jpg))

The Great Scholars of Marrakesh

Many historians flourished in Marrakesh, most living in the surrounding of Caliphs, such as Abu Bakr al-Sanhadji, who wrote extensively on the Almohads, and whose work was traced by Levi Provencal to the Spanish collection at the Escurial.[60]

Abd al Wahid Al-Marrakushi was born in Marrakech on the eighth of July 1185. When nine years of age, he left his native place for Fez, a city renowned for its learned men, where he studied the Qur'an and was the pupil of many eminent doctors, well skilled in grammar and the reading of the Sacred Book. [61] He later returned to Marrakesh, and made more travels. He met Ibn Zuhr who at that time was quite advanced in age, but who treated Abd al Wahid, aged then fourteen, with great kindness. [62] In the year (1206-7) he crossed over to Spain, where he studied under a great number of learned men well versed in every branch of science.

Being extremely modest, Abd al Wahid claimed:



As Providence had denied him talent, he did not much profit from their lessons." [63]

Again, out of modesty, our author also states that he recited a poem to the fourth Almohad prince, but it was very bad, and yet the prince still acted kindly and approved it, and even went as far as saying to our author that he, the prince, enjoyed his company so much that he longed for it when Abd al Wahid was absent.[64]

Abd al Wahid studied polite literature at Cordova, under the direction of al-Himyari (who died in H. 610), a professor whom he praises very much and with whom he remained for two years.[65] In 1217, Al-Marrakushi left Seville for Egypt, then like every scholar of the era, he made his pilgrimage to Makkah in the year 1221.[66] In

1224, he completed a history of the Almohad dynasty, preceded by a summary of Spanish history from the Muslim conquest to 1087 (*Kitab al-mujib fi talkhis akhbar ahl al-Maghrib*).[67] Al-Marrakushi begins his work with the Muslim arrival in Al-Andalus and describes the country, its early governors, emirs, and caliphs. He often interrupts his account to discuss prominent men of letters, to whom he often devotes more space than that allotted to the rulers.[68] His sources of information, ordinarily acknowledged, consist of data transmitted to him by eyewitnesses or derived from old sources, mainly the works of Ibn Hayyan and Ibn Hazm.[69]

Al-Marrakushi was very keen on historical truthfulness:

I have put down nothing but what I have found true, borrowing it from books [in the historical introduction], or having heard it from trust-worthy persons, or having seen it myself: with the firm purpose of telling the truth and of being just, as it has been my utmost care not to conceal a single good quality, which the persons I haven spoken of possessed, nor to bestow upon them the slightest encomium they did not deserve." [70]

Dozy insists, that as Abd al Wahid had lived in the states of the Almohad dynasty whose history he afterwards wrote, but did not dwell there when writing, and so we may expect that his narrative will be on the whole impartial and free. And, indeed, we find that in general he is impartial.[71]

66 If his judgments are sometimes commending, it must be attributed to his real admiration of the high qualities of the person of whom he speaks.... And no vile adulation is found in his history." [72]

In his History of the Almohads, the readers will find that the information Al-Marrakushi gives is priceless, as everywhere, almost at every page, he quotes contemporary witnesses of the events he relates, and amongst these not only the names of the highest officers of the state, but of princes themselves. He himself tells us that he derived the greatest part of his narrative from a highly respectable authority, namely, from Ya'qub, the grandson of the founder of the dynasty, and as he could consult no book on the history of the Almohads, his information was original.[73]

There is a French translation of the work by Fagnan.[74] Extracts can be found in Wustenfeld, and Levi Provencal. [75] The text has been edited by R.P. A. Dozy as follows: *The History of the Almohades, preceded by a sketch of the history of Spain, from the times of the conquest till the reign of Yusof ibn-Táshiján, and of the history of the Almoravides, by Abdo 'I-Wáhid Al-Marrákoshí*: Dozy's edition of the original book *Tarikh al-Muwahhidin* by 'Abd al-Wahid al-Marrakushi (1185-1228) detailed out the glorious era of the Almohads (1121-1269) and was published by the Society of Publication of Oriental Texts, London in 1847.[76]

Ibn Idhari al-Marrakushi wrote in 1312 a history of North Africa and Spain, *Kitab al-bayan al-mughrib*, which includes the most detailed account of the Umayyads of Cordova. Dozy turned the work into French as follows: *La Chronique d'Afrique et l'Espagne*: A work of translation from *al-Bayan al-Mughrib fi Akhbar al-Maghrib* authored by Ibn 'Idhari (late 13th- early 14th century). This work by Dozy came in two volumes. The first was published in 1848, while the second was in 1851 by E. J. Brill, Leiden.[77] A partial translation was first made in Spanish by Francisco Fernandez Gonzalez.[78] There is also a partial translation by Huici Miranda made in the early 1960s. [79]

The work is a comprehensive history of the Muslim conquest up to the author's time (667/1270), arranged chronologically according to important topics.[80] Of the three surviving volumes, Volume 1 is entirely devoted to North Africa and includes its major dynasties; Volume 2 deals specifically with Al-Andalus and gives special

attention to its rulers, revolts, and dynasties up to the year 1086; and Volume 3 documents the Almoravids (11th-12th centuries) and then the Almohads (12th-13th centuries) until the rise of the Marinids (of Morocco).[81] Ibn Idhari quotes the sources he has used such as the *Muqtabis* of Ibn Hayyan, and the *Dhakhira* of Ibn Bassam.[82]

His work, or more particularly the third volume, is a most useful source, because it offers the most detailed narrative of the events of the Spanish civil wars in the wake of Ibn abi Amir's (al Mansur) death (1002). The author did not see himself as a *bahith* (researcher), but as a *jami*' (compiler).[83] He says in the introduction to his history that 'I have collected in this book notices and anecdotes taken from the histories and accounts, which I have reunited and have chosen points of interest, uniting what is old with what is new.'[84] He also quotes the sources he has used: among the twenty six books actually mentioned are included (the *Muqtabis*, and the *Alkhbar al-Dawlat al-amiriya* of Ibn Hayyan, and *the Dhakhira* of Ibn Bassam.)[85] There is no mention of the *Matin* but it is probable that he had access to information from the *Ta'rikh al-kabir*, even if second-hand.[86] The *Bayan*, at least in its first three volumes which describe the events from 21 AH to the arrival of the Almoravids, is a *ta'rikh 'ala s-sinin majmu'a*, a carefully selected collection of data from earlier writers, and its importance lies in the nature of that data, much of which would otherwise be unavailable today.[87]

Ibn Rushd was born in 1126 in Cordoba into a family of learning and culture—both his father and grandfather were distinguished judges. In 1153 he was in Marrakesh engaged in astronomical observations. In 1163, the philosopher Ibn Tufayl (1105-1185) introduced him to the Almohad ruler, Abu Ya'qub Yusuf. Ibn Rushd succeeded Ibn Tufayl as chief physician in 1182 and served Abu Ya'qub Yusuf until the latter's death in 1184. He then served his son and successor, Ya'qub al-Mansur. Although engaged in astronomical observations in Marrakesh, and his treatise on the motion of the sphere (*Kitab fi harakat al-falak*), on the scientific front, Ibn Rushd is best known for his very influential medical work, *Kitab al-kulliyat fil-tibb* (hence the Latin name Colliget al-Kulliyyat (The generalities). Written before 1162, in seven books treating respectively of anatomy, health (physiology), general pathology, diagnosis, materia medica, hygiene, and general therapeutics. Ibn Rushd recognized that no one is taken twice with the smallpox. He also explained the function of the retina. Ibn Rushd's *Kulliyat* was translated into Latin by Bonacossa. With Ibn Zuhr's *Taisir*, it was according to Sarton `the most valuable of their kind in medieval times.'[88]

There is a great tradition of astronomical knowledge in Morocco, in general, and Marrakesh specifically. Abu Ali al Hassan-al-Marrakushi's (fl. 1281-1282) shows his good acquaintance with the mathematical and astronomical works of al-Khwarizmi, al-Farghani, al-Battani, Abu'l Wafa, al-Biruni, Ibn Sina, al-Zarqali, and Jabir Ibn Aflah. For example, he shared al-Zarqali's belief that the obliquity of the ecliptic oscilliates between 23033' and 23053', a belief which tallied with the notion of the trepidation of the equinoxes.[89]

His main work is *Jami al-Mabadi wal-ghayat* (the Unity of the beginnings and ends; i.e. principles and results), probably completed in 1229-1230. Sedillot made a French translation of the first half [Book 1 and the first three parts of Book 2] of the book. The rest of Book 2 was summarized in a rather inadequate fashion by the same L. A. Sédillot. The third and fourth books do not seem to have been investigated.[90] This work represents one of the first Islamic astronomical texts to have been translated into a European language in the modern period and was given a prize by the Académie des Inscriptions et Belles-Lettres in 1822.)[91] The book was intended as a comprehensive encyclopaedia of practical astronomy. This work is the single most important source for the history of astronomical instrumentation in Islam. It was the standard reference work for Mamluk Egyptian and Syrian, and Ottoman specialists of the subject.[92] **Francois Charette**, who wrote an excellent outline on this work and its author, states that this voluminous work (most complete copies cover 250 to 350 folios of text, diagrams, and tables)

Has occasionally been qualified as a mere compilation of older sources without original contents. While it is true that this synthetic work heavily depends upon the works of predecessors, it is definitively original and without any precedent. In fact, no single part of the work can be proven to reproduce the words of an earlier author, except for

the few sections where Marrākushī clearly states from whom he is quoting. In those occasional cases where an earlier source is mentioned, Marrākushī's text always turns out to be either a major rewriting of the original or an independent paraphrase.[93]

In Marrakesh was also a great tradition of constructors of astrolabes,[94] and a great deal of information on such figures and their accomplishments can be found in Mayer.[95] In al-Marrakushi's work are developed the construction of planispheres, astrolabes, quadrants and the need of gnomonics, which constituted the great interest of Sedillot.[96]

Today, of course, the works by King (David) and Samso (Julio), in particular, are far more up to date in informing us about the subject.

We can cite amongst such works the following:

- J. Samsó, Las Ciencias de los Antiguos en al-Andalus. Almería, 2011.
- David A. King: Astrolabes from Medieval Europe.[97]
- D. King: In Synchrony with the Heavens.[98]
- David A. King, "Astronomical Instruments in the Islamic World".[99]

The book by al Marrakushi is itself made of four books, two of which deal with

- On the construction of instruments, in seven parts. The first part concerns graphical methods in spherical
 astronomy and gnomonics. The second through the seventh parts then treat the construction of portable
 dials, fixed sundials, trigonometric and horary quadrants, spherical instruments, instruments based upon
 projection, and observational and planetary instruments.
- On the use of seclected instruments in 14 chapters.[100]

The *Jami* of Hassan al-Marrakushi was, Sarton holds, 'the most elaborate trigonometrical treatise of the Western caliphate, the best medieval treatise on practical astronomy, on gnomonics, the best explanation of graphical methods.'[101] The part dealing with gnomonics contained studies of dials traced on horizontal, cylindrical, conical, and other surface for every latitude.[102] Al-Marrakushi gave a table of sines for each half degree, also tables of versed sines and arc sines (this last one he called the table of al-Khwarizmi). To facilitate the use of gnomons he added a table of arc cotangents.[103] The second part of *al_jami* was devoted to the explanation of graphical methods of solving astronomical problems.

It is interesting here to note how Al-Marrakushi has devoted much study to trigonometry and associated subjects, and then to read in some works on the history of science, including by one of the most renowned figure of such history, **Crombie**, saying the following:

66 The development of modern trigonometry dates from mathematical work done in Oxford and France in the fourteenth century in connection with astronomy.[104]

Had Crombie, just like the tens or hundreds of his followers just briefly consulted al-Marrakushi, they would have realised how far from the truth they were.

What is very interesting about this Muslim scholar is the following observation by Charette:

66 Al Marrakushi, as his name indicates, he was originally from the Maghrib, but his major astronomical activities took place in Cairo during the second half of the 13th century. It is not too surprising, given the turmoil affecting al-Andalus and Maghrib at that time, that a scholar from the

westernmost part of the Islamic world would decide to emigrate to Egypt, whose capital Cairo was already established as the major cultural center of the Arab–Islamic world." [105]

This point is absolutely crucial. It confirms yet more the notion that Muslim scholars had to flee the regions that were in turmoil, either attacked by the Crusaders in the East, or by the Mongols from the east, and by Christian armies in Iberia during the Reconquista (began sometime before and intensified after 1050, and lasted until after the conquest of Grenada (1492) as partly explained in this article. If this confirms one thing, which this author keeps claiming in all his articles and writing is that Muslim civilisation did not come to an end because of Islam, or because Muslims suddenly became mentally impotent. Muslim civilisation, as this instance and countless others from all parts of the Muslim world confirm, came to an end because Muslim scholarship was hounded off from one place to the other. And, indeed, if the Mongols had managed to defeat the Mamluks at Ain Jalut in 1260, and if Egypt had fallen then, Muslim civilisation, in fact the whole of Muslim existence, would have been terminated in 1260.

The following heading is also utterly crucial to reinforce this central idea.



Figure 6. A Marrakech restaurant (Source (https://www.telegraph.co.uk/travel/destinations/africa/morocco/marrakech/articles/marrakech-restaurants/))

From Marrakesh to Spain

The beginning of the end of Muslim power in Spain went back to the early 11th century. Following his death, in 1002, Al-Mansur was succeeded by his son al-Malik, whose rule did not last very long. Setting out on a military campaign against the Christians in October 1008, he fell ill and died at the early age of thirty three, possibly, as some Muslim chroniclers suggested, the victim of poison administered by his younger brother, Abd al Rahman, known as Sanjul, who took control of the government.[106] Sanjul was a libertine who lacked political wisdom, and whose ambition led him to claim the role of Caliph.[107] In February 1009, just a few months after his claim of

power, and whilst he was warring north, an uprising against his rule occurred in Cordoba, followed by the sack of its palaces.[108] The end of the Amirids (so named after Ibn Abi Amir al Mansur) inaugurated the beginning of an era of rapidly spreading chaos, as various factions turned on each other, struggling to establish control in a country prey to chaos and disorder.[109] That was the end of the Caliphate in Spain.

There now succeeded the rule of the Reyes of the Taifas, Muslim Spain breaking into thirty independent republics that engaged in fratricidal wars between themselves.[110] Muslim historians such as Ibn Hayan, Ibn Hazm, and Ibn Bassam gave excellent accounts of the break up of the country and its disastrous effects.[111] Ibn Hazm and Ibn Bassam blame both the rulers for their indolence and preoccupations with their own pleasures and the Muslim community which had lost touch with the practices of its faith.[112]

Ibn Hazm was sharp in his denunciation of the Taifa kings:

66 By God, I swear that if the tyrants were to learn that they could attain their ends more easily

by adopting the religion of the Cross, they would certainly hasten to profess it! Indeed, we see that they ask the Christians for help and allow them to take away Muslim men, women, and children as captives to their lands. Frequently they protect them in their attacks against the most inviolable land, and ally themselves with them in order to gain security." [113]

The schools of Cordova and Seville, Yonge remarks, still educated men in science and literature. Geometry, algebra, natural history, and poetry were studied, and the houses and gardens of the Moors were still exquisite; but 'their fiery courage and steady endurance were gone, and their emirs were disunited.'[114]

The collapse of Muslim power and divisions were seized upon by the Christians who began to sweep south.[115] They saw their opportunity, and they made the most of it, observes Lane Poole.[116] The Christian push was further strengthened as Pope Alexander II (Pope 1061-1073) launched the crusade which aimed at the conquest of Muslim territory throughout the Mediterranean.[117] Christian unity of purpose little deterred the local Muslim Spanish rulers from their squabbles. The Christian re-conquest of Spain proceeded 'as rapidly as the fraternal chaos of the Spanish kings would permit,' notes Durant.[118] The Christians attacked and captured Barbastro in 1064, and, more decisively, Toledo fell in 1085. The fall of Toledo symbolises both Muslim decadence, and also the gravity of the new situation.[119] The surrender of Toledo, O'Callaghan remarks, was an event of great importance in the history of medieval Spain.[120] Alfonso VI was able to occupy not just the city but also the whole broad region in the Tagus Valley reaching from Talavera on the west to Guadalajara on the east.[121] Toledo which would never be recaptured by the Muslims, although threatened on occasions, became the center of the region known as New Castile.[122] The capture of Toledo not only marked the fulfilment of one of the most cherished Christian dreams, it also seemed to augur the rapid dissolution of al-Andalus.[123] Following its capture, Dozy remarks, the arrogance of Alfonso was only matched by the abject servility of the Muslim princes.[124] No Muslim territory was safe. After Toledo, Valencia's turn came. Al Kadir was nominally its king, but most of its territory was in the hands of the Castilians. Zaragosa also seemed lost. Alfonso besieged it, and vowed to capture it.[125] Nor was Granada spared, for in the spring of 1085, the Castilians advanced to the village of Nibar, a league to the east of the city, and gave battle to the Muslims. In every guarter danger threatened, and total lack of confidence prevailed. Muslims dared not attack the Christians even with a superiority of five to one.[126] It was now obvious that Muslim Spain had reached its lowest condition. [127] All was not yet lost, and help might yet be obtained from Africa.[128] This help could come from the now strong Almoravid dynasty and its capital: Marrakesh, which was on the ascendancy. The decision was not easy, though. A council was held at Seville, to which each emir came in person, or sent a gadi to represent him, and the proposal was there brought forward of calling in the aid of the African brethren.[129] It was to Yusuf Ibn Tashfin, the new leader of Almoravid Dynasty in North Africa, that the emirs proposed to ask for aid. Muslim historians have preserved the actual letter of invitation. It said amongst other:



To the most mighty Emir, by the favour of Allah Imam of the Muslims, Prince of the

Almoravides, Yusuf-ben-Tashfyn, with the light of whose splendour Allah illuminates all parts of the earth, wills whose perfection Allah adorn all creatures.

We, the Muslims of Andalusia, have not preserved our illustrious tribes: we have dispersed and intermixed them, and have long had no fellowship with our tribes and families who dwell in Africa. Want of union has divided our interests; disunion has led to discord, and our natural enemies are prevailing against us.

Each day becometh more unbearable—the fury of King Alfonso, who, like a mad dog, enters our lands, takes our castles, makes Muslims captive, and will tread us under foot unless an emir from Africa will arise to defend the oppressed, who behold the ruin of their kindred, their neighbours, and even of their law.

We dare no longer raise our heads; and since thou, great lord, art the offspring of Homayr, our forefather, we turn to thee in hope, entreating thee to hasten to Spain to overcome our faithless and treacherous foe, who seeks to destroy our law. He has just written us a letter, full of thunders and lightning, that we may yield our castles and towns and leave him our mosques, that he may fill them with his monks, set up his crosses on their minarets, and sing his mass and requiem where prayer is made!

Allah has made for thee, king of true Believers, an empire whose increase He blesses. He has made thee His messenger, that thou mayest uphold His law and share the brightness of His divine light.

If thou art moved by desire of earthly wealth, here wilt thou find rich carpets, jewels of gold and silver, precious raiment, delicious gardens, and clear springs of flowing water. But if thine heart seeks only to win eternal life in Allah's service, here is the opportunity, for never are wanting bloody battles, skirmishes, and fights. Here has Allah placed a paradise, that from the shadow of weapons thou mayest pass to the everlasting shadow, where He rewards the deserving." [130]

Yusuf was very devout, and he viewed with repugnance the wine-bibling, the music and corrupt culture of al-Andalus, together with the crippling taxes which paid for the luxuries.[131] However, the situation was pressing, and he was ready to answer favourably. He insisted upon the transfer to him of the island of Algesiras as an indispensable condition of the alliance.[132] This was agreed upon. Once that was done, the Almoravids set to prepare their march north into the Iberian Peninsula.

Before he boarded ship, Yusuf prayed devoutly to Allah:

66 Oh God, if this crossing will help Islam, make it easy for me; if not rouse the sea and force me to return." [133]

The wind was favourable, and Yusuf set foot in Spain on June 30th, 1086.[134]

Ibn Khallikan wrote:

66 When all the army of Yusuf Ibn Tashfin had crossed over, to the last man, he sent after them so many camels that the Peninsula was choked with their multitude, whilst their cries reached the vault of heaven. The people of Spain had never seen camels, and the Spanish horses, not being

accustomed to the strangeness of their shape and the singularity of their cries, were filled with trouble and affright." [135]

Yusuf's army was an impressive sight, indeed. It was said that the best amongst Yusuf's men 'could cut a horseman in two with a single stroke of the sword, and pierce through the bodies of several adversaries with one single thrust of a lance.'[136]

Meanwhile, the King of Castile, Alfonso VI, had not been idle. The siege of Saragossa, which had for months engaged his attention and 'consumed the energies of his followers,' was hastily raised on the news of the Almoravid arrival. Orders were dispatched to every vassal to ride with his retainers to an appointed rendezvous. [137] Alfonso VI not only rallied his forces from all his kingdoms but also obtained help from Aragon.[138]

Early in the fall of 1086 Alfonso set out to engage the Muslims. The two armies marched in direction of each other, and in the end encamped on either side of the river of Badajos, at a place called *Al Zallakah*, or the slippery.[139]

Relying on his astrologer's predictions, al Mu'tamid awaited Yusuf's army to join him. Yusuf, however, did not believe in astrology, and was in no hurry to send his men towards al Mu'tamid. He had formed a plan of battle to which he intended to adhere.[140]

The Christian army, under Count Garcia Ramirez of Aragon, fell on al Mu'tamid Andalusians, and covered them "as the shades of night cover everything." [141] The Taifa princes, and their troops, who were by the side of al Mu'tamid, true to their reputation, says Menendez Pidal, 'quaked' at the approach of the enemy and soon fell into disorder. [142] They hurriedly fled in the direction of Badajoz, relentlessly pursued by Alfonso's vanguard, led by Alvar Hanez, and with none to help them. [143] It was then that Yusuf intervened. The clash between the two armies was terrific. [144] The Muslims maintained a fierce assault. The thundering roll of the Almoravid drums, now heard for the first time on Spanish soil, shook the earth and resounded in the mountains. [145] 'In the long series of sanguinary engagements which marked the progress of the Reconquest, none was more stubbornly contested than the battle of Zallaka,' says Scott. [146] Time and again the Muslim position was taken and lost. The pride and valour of the Castilians fought with determined obstinacy the field which a few hours before they had thought already won. [147] Ibn Tashfin slaughtered the Spaniards so much so that many thousands of the best sword-arms in Castile 'lay stiff and nerveless on that fatal field.' [148] The entire loss of the Christians was more than twenty thousand, according to conservative sources. [149] Prior to battle, Alfonso as he looked upon his own splendid army, exclaimed: 'with men like these I would fight devils, angels, and ghosts!' [150]

The consequences of victory were far reaching.

The victory at Sagrajas (Zallakah) [Menendez Pidal says] served to cement an Islam that had become disunited on either side of the Straits. When on the battlefield, Mu'tamid, wounded in many places and with a broken arm, congratulated Yusuf on his great victory, he and the thirteen Andalusian kings and emirs who fought that day greeted Yusuf as 'Emir al-Mu'mineen,' or prince of the faithful, and Yusuf adopted the solemn title for his official documents. Pious Muslims in Spain and Africa gave alms and freed slaves in thanksgivings to Allah for the signal proof of His love for His people. Spanish Islam, cultured no doubt, had lacked cohesive force until it eventually found it in the religious fervour the Africans came to arouse in Andalusia.[151]

This victory had a great impact. It compelled the Castilians to evacuate the kingdom of Valencia and to raise the siege of Zaragoza.[152] The Andalusian princes, moreover, were relieved from their shameful obligation to pay Alfonso an annual tribute, and the fortresses, which were henceforth defended by the soldiers whom Yusuf had supplied to al Mu'tamid, had nothing to fear from the attacks of the Emperor.[153] The Almoravid victory at Zallakah, Norris rightly points out, delayed the Christian re-conquista by centuries.[154]

War between Muslims and Christians soon reached a savagery equal to that of the East under the Crusades.[155] The popes gave the same privileges to the Christians fighting in Spain as those of the crusaders in the East.[156] Despite that, Ibn Tashfin triumphed and saved al Andalus. The recapture of Valencia was the last achievement in the life of Yusuf. With the exception of the city of Toledo, and the principality of Saragossa soon to succumb to the arms of his son, the entire realm of Muslim Spain was subject to his authority.[157] This great conquest had been accomplished in less than three years. His realm was equal in magnitude to those of the Umayyads and Abbasids combined, and the entire region of Northern Africa, from Tunis to the Atlantic, obeyed his edicts.[158]

Beyond the glory on the battle field, the Almoravids, under Yusuf Ibn Tashfin, first and foremost did was to preserve Muslim civilisation in Spain from extinction. The loss of Toledo to the Christians in 1085 had a dramatic effect on both the scholarship of the city, and eventually on the whole history of Spain. At the fall of the city, Muslim scholars, in large numbers, were either slain or fled south to Seville and other places.[159] Al-Zarqali (d. 1087), the famed instrument maker, was one of those who fled, just as Ibn al-Wafid and Ibn Bassal, who fled for Seville to the court of Al-Mu'tamid.[160] Ibn Bassam describes how incessant Christian invasions forced him to run away from Santarem in Portugal 'The last of the cities of the West,' after seeing his lands ravaged and his wealth destroyed, 'a ruined man with no possessions save his battered sword.'[161] Many other scholars were either killed by marauding Christian parties, or had to emigrate altogether out of Spain, to Egypt, or as far as Yemen.[162] Abu Salt of Denia, and Abu Behr al-Turtushi of Tortosa left Spain to take refuge in Egypt.[163] Others were more unfortunate, like the poet Ibn Wahbun, who was murdered by Christian raiders on the road from Lorca to Murcia in 1087.[164] Once Toledo became Christian, the main mosque was turned into a cathedral, the Arabic language, spoken and written, continued to be employed by the Mudejars (Muslims under Christian rule), and by Mozarabs (Christians under Muslim rule) and their descendants, especially during the period of translations from Arabic into Latin, but with time, Arabic in Toledo tended towards irremediably disappearing.[165]

The same fate awaited Muslim Spain until Yusuf held up the Christian advance. Had it not been for his intervention in 1086-90, and Almoravid subsequent domination of Spain, the days of Muslim power in Spain would have ended in the late 11th century instead of the mid 13th century.[166] If the Almoravids had not intervened, or if they did not have the military strength they had under Yusuf, Christian armies would have advanced into North Africa, and then eastward to join with the crusaders in the East. Had the Christians joined up in the East, the Muslim principalities there had little or no military might, and would have easily been brushed away, the Muslim world then being at its weakest, without yet Mamluk power or leaders such as Zangi, Nur Eddin, Salah Eddin and Baybars. The corrupt Fatimid rule of Egypt would have given ground on the first occasion. A Christian advance into North Africa would have, thus, meant the end of Islam. Thus can be seen the remarkable historical role of the Almoravids of Marrakesh.

Had it not been for the Almoravids, Muslim scholarship in Spain would also have ended two centuries prematurely. Under Yusuf's support, there thrived scholarship on either side of the Strait. Thanks to the peace and security Ibn Tashfin secured, there lived at Cordova many great men of sciences, and the Almoravid court was 'a buzzing place of intellectual activity.'[167] One important jurist in Seville and Almeira was Maymun ibn Yamin al-Lamtuni, who mastered the Arabic language, fiqh and tafsir.[168] The Almoravid princesses, themselves, were encouraged in their literary endeavours, and were distinguished poetesses in Arabic, including among them Hawwa, the niece of Yusuf, and Tamima, one of his daughters.[169] Learning thrived under Almoravid rule, and books became one of the major commodities as we have seen with the Kutubia of Marrakesh above. And such was the stimulus it provided for the demand for books, it stimulated the progress of paper manufacturing in Fes.[170]



Figure 7. Medina (old city) bazaar

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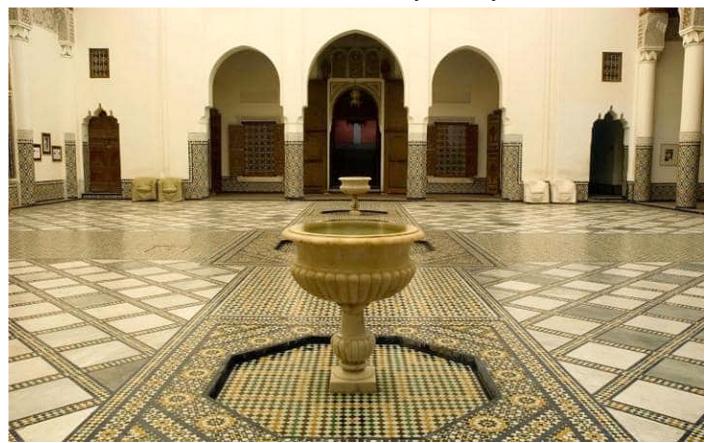


Figure 8. Hammam inside Marrakech Museum (Source

(https://www.telegraph.co.uk/travel/destinations/africa/morocco/marrakech/articles/marrakech-attractions/))

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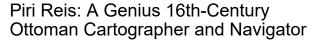


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